

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-13. Canceled

14. (Previously Amended) A surgical apparatus as claimed in claim 32, wherein the first and second tissue stimulation elements comprises first and second stimulation electrodes.

15-16 Canceled

17. (Previously Amended) A surgical apparatus as claimed in claim 33, wherein the first and second tissue stimulation elements comprises first and second stimulation electrodes.

18. Canceled

19. (Previously Amended) A surgical apparatus as claimed in claim 33, wherein the anchor includes a flexible carrier.

20. (Original) A surgical apparatus as claimed in claim 19, the flexible carrier is non-linear when in a relaxed state.

21-31. Canceled

32. (Currently Amended) A surgical apparatus for use with a tissue structure, comprising:

a first tissue stimulation element and a second tissue stimulation element, each of the first and second tissue stimulation elements having a diameter of about 0.5mm to 1.0mm and being configured to emit non-ablative stimulation energy that is applied to the tissue structure to determine whether a transmural myocardial lesion has been formed, the tissue stimulation element being structurally configured ~~to not~~ to form a transmural myocardial lesion when non-ablative energy is delivered to and emitted from the tissue stimulation element; and

means, associated with the first and second tissue stimulation elements, for securing the surgical apparatus to the tissue structure by ~~piercing~~ engaging a single side of the tissue structure at a first tissue structure location and pressing the first and second stimulation elements against the single side of the tissue structure at respective second and third tissue structure locations different than the first tissue structure location, wherein the first and second stimulation elements are located on opposite sides of a central portion of the means for securing the surgical apparatus to the tissue and, ~~wherein~~ neither of the first and second stimulation elements has a sharpened end and both of the first and second stimulation elements are positioned relative to the means for securing the surgical apparatus to the tissue structure such that the first and second tissue stimulation elements are pressed against the single side of the tissue structure and do not pierce the tissue structure.

33. (Currently Amended) A surgical apparatus for use with a tissue, comprising:

a first tissue stimulation element and a second tissue stimulation element, each of the first and second tissue stimulation elements having a diameter of about 0.5mm to 1.0mm and being configured to emit non-ablative stimulation energy that is applied to the tissue to determine whether a transmural myocardial lesion has been formed, each of the first and second tissue stimulation elements being structurally configured ~~to not~~ to form a transmural myocardial lesion when non-ablative energy is delivered to and emitted from the tissue stimulation element; and

an anchor carrying the first and second tissue stimulation elements, the anchor being configured to secure the surgical apparatus to the tissue by piercing the tissue at a first location and to press the first and second stimulation elements against the tissue at respective second and third locations different than the first location, wherein the first and second stimulation elements are located on opposite sides of a central portion of the anchor that pierces the tissue at the first

location, and neither of the first and second stimulation elements has a sharpened end and both of the first and second stimulation elements are positioned relative to a portion of the anchor that pierces tissue such that the first and second tissue stimulation elements are pressed against the tissue and do not pierce the tissue.

34. (Currently Amended) A surgical apparatus for use with a tissue surface, comprising:

a first tissue stimulation element and a second tissue stimulation element that are configured to emit non-ablative stimulation energy that is applied to the tissue surface to determine whether a transmural myocardial lesion has been formed, the tissue stimulation element being structurally configured ~~to~~ not to form a transmural myocardial lesion when non-ablative energy is delivered to and emitted from the tissue stimulation element;

a flexible carrier movable between an unstressed state and a deflected and stressed state and including a first end portion that carries the first tissue stimulation element, a second end portion that carries the second tissue stimulation element, and a curved interior portion located between the first and second end portions and configured such that the curved interior portion will be in spaced relation to the tissue surface when the end portions are in contact with the tissue surface and the carrier is in the unstressed state, wherein the carrier is configured to press the first tissue stimulation element and the second tissue stimulation element against the tissue surface when in the deflected and stressed state, wherein the first stimulation element and the second stimulation element do not have sharpened ends such that the first stimulation element and the second stimulation element are pressed against the tissue surface without piercing the tissue surface; and

a tissue engagement device carried by the curved interior portion of the carrier between the first and second tissue stimulation elements and configured to secure the carrier to the tissue surface in the deflected and stressed state wherein the first and second stimulation elements are located on opposite sides of a central portion of the flexible carrier that pierces the tissue.

35. Canceled

36. (Previously Presented) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device is configured to hold the curved interior portion of the carrier substantially against the tissue surface.

37. (Previously Amended) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device comprises a first tissue piercing member and a second tissue piercing member.

38. (Withdrawn) A surgical apparatus as claimed in claim 34, wherein the tissue engagement device comprises a helical tissue piercing member.

39. Canceled

40. (Previously Amended) A surgical apparatus as claimed in claim 34, wherein the first and second tissue stimulation elements comprise a first stimulation electrode and a second stimulation electrodes.

41. (Previously Amended) A surgical apparatus as claimed in claim 34, the first tissue stimulation element and the second tissue stimulation elements each having a diameter of about 0.5mm to 1.0mm in diameter, wherein a size of each tissue stimulation element is too small to form a transmural myocardial lesion.

42. (Previously Amended) The surgical apparatus of claim 34, the tissue engagement device having a sharpened end for piercing the tissue surface.

43-47. Canceled

48. (Previously Presented) The surgical apparatus of claim 33, wherein the first stimulation element and the second stimulation element are carried by opposite end portions of the anchor.

49. Canceled

50. (Previously Amended) The surgical apparatus of claim 34, wherein the flexible carrier is configured to pierce the tissue and press the first stimulation element and the second stimulation element against the tissue surface without the first tissue stimulation element and the second stimulation element piercing the tissue surface.

51. (Previously Amended) The surgical apparatus of claim 33, the anchor comprising a central portion, a first end portion and a second end portion on opposite ends of the central portion, wherein the central portion of the anchor is configured to pierce the tissue, and the first and second tissue stimulation elements are located on the respective first and second end portions.

52-53. Canceled